OIPE
NOV 10 2004
PATENT & TRADEMARK OFFICE
JC67

Figure 1

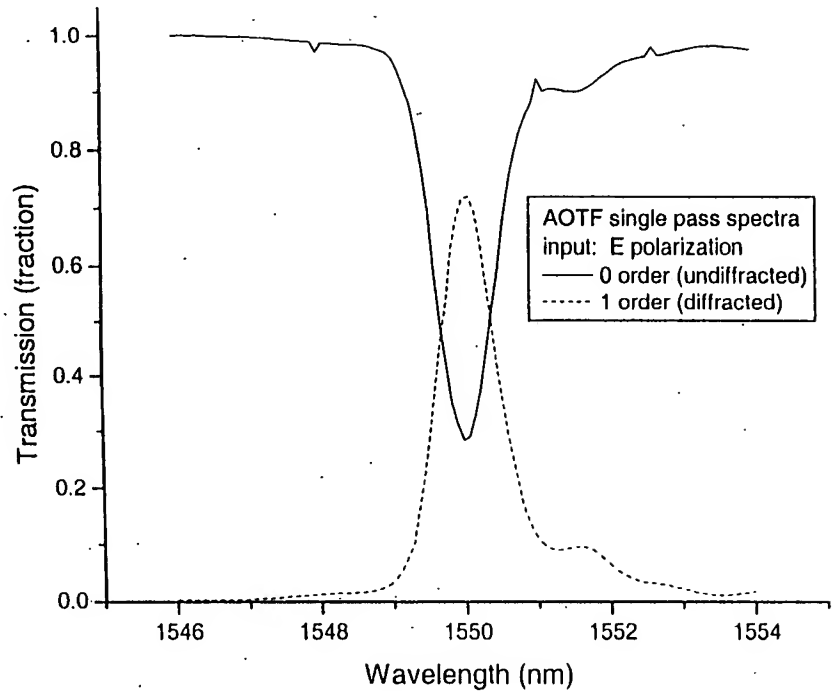


Figure 2

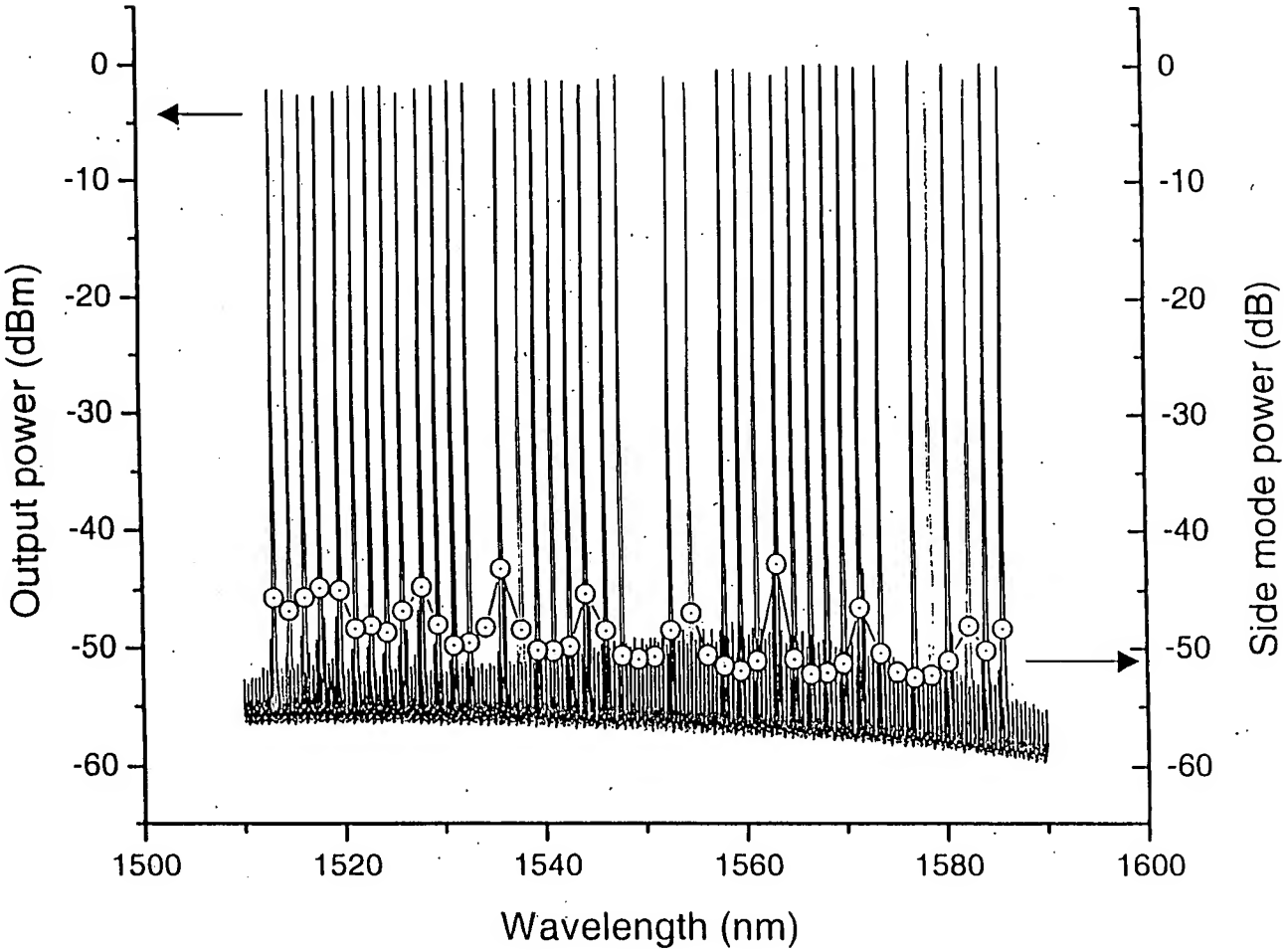

0
-10
-20
-30
-40
-50
-60
Output power (dBm)
Side mode power (dB)
1500
1520
1540
1560
1580
1600
Wavelength (nm)

Figure 3

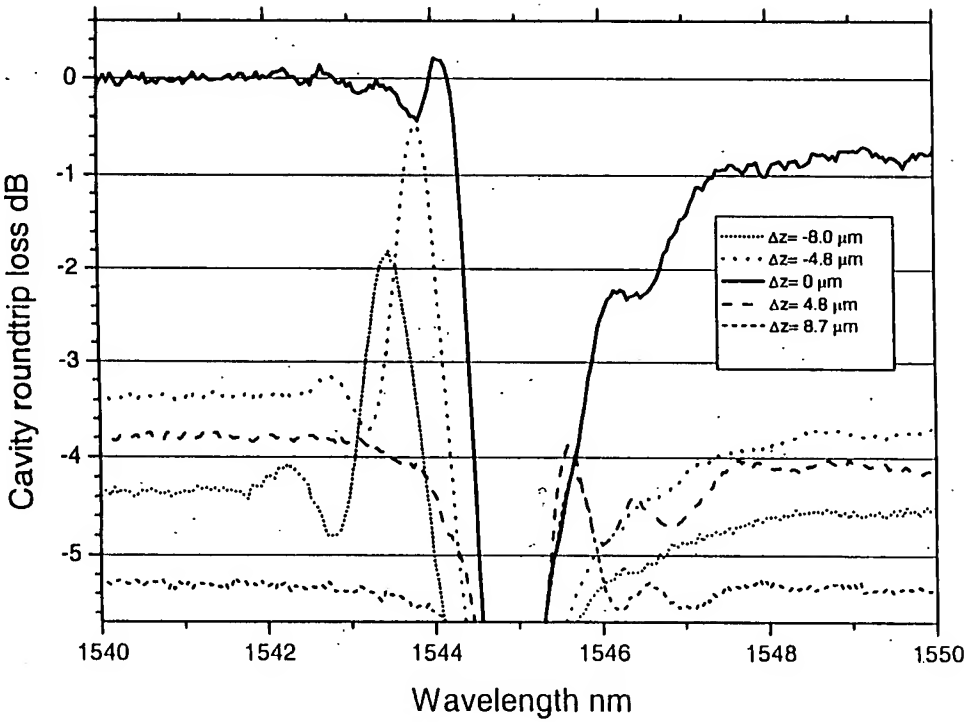

Cavity roundtrip loss dB
0
-1
-2
-3
-4
-5
1540
1542
1544
1546
1548
1550
Wavelength nm
Δz= -8.0 μm
Δz= -4.8 μm
Δz= 0 μm
Δz= 4.8 μm
Δz= 8.7 μm

Figure 4

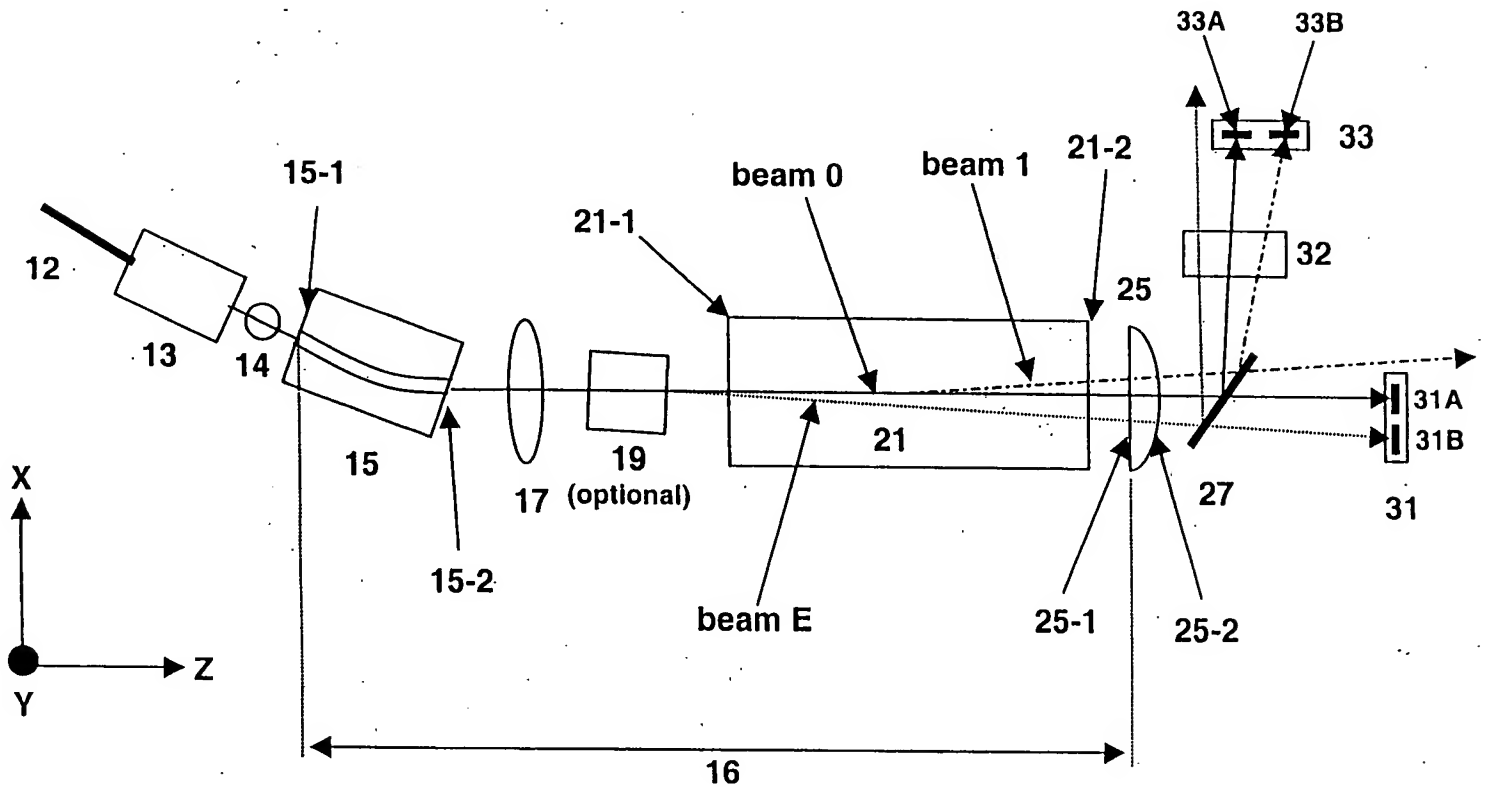

33A
33B
33
32
15-1
beam 0
beam 1
21-2
21-1
25
12
13
14
15
17
19
(optional)
21
31A
31B
31
27
15-2
beam E
25-1
25-2
X
Z
Y
16

Figure 5

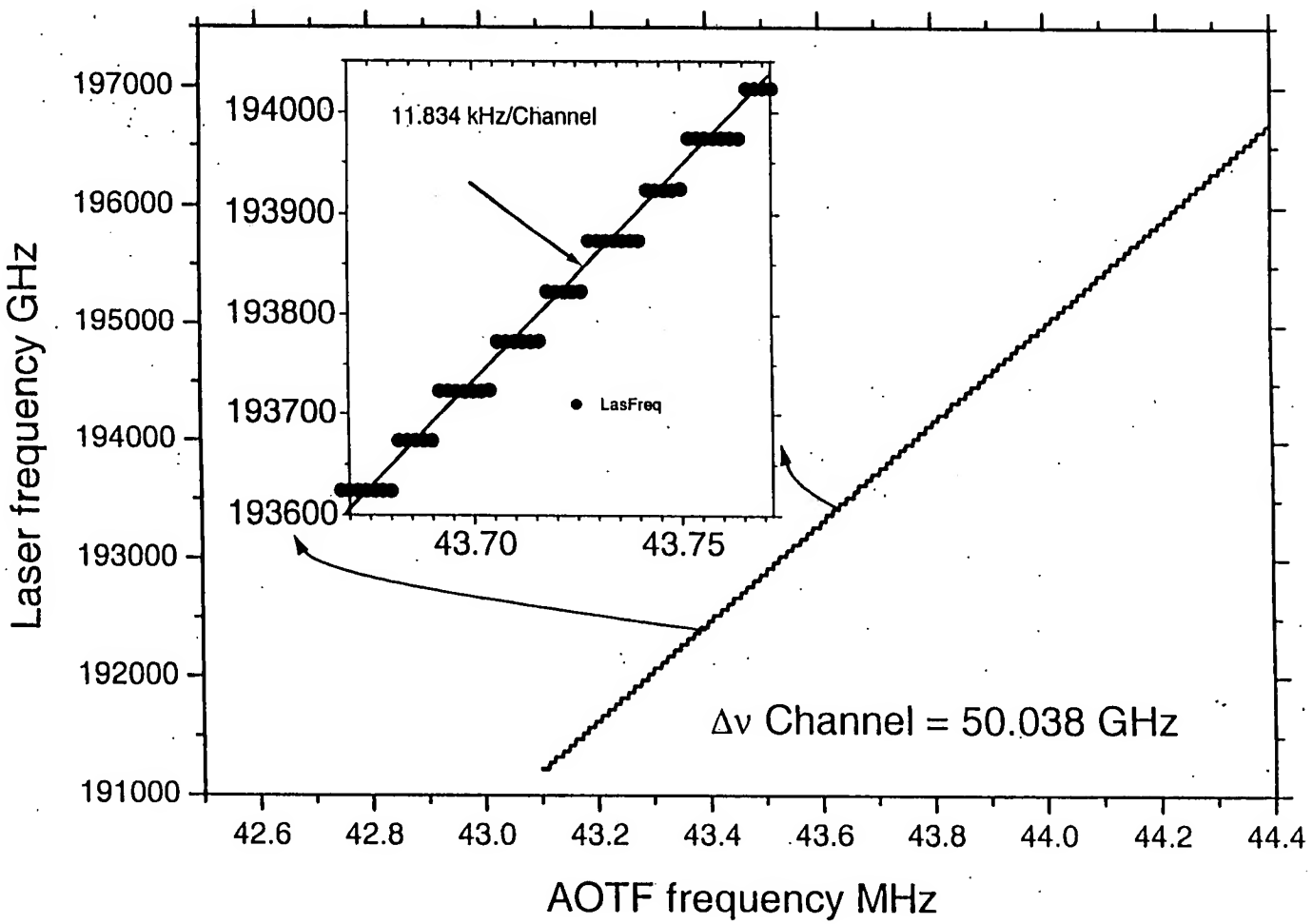

Laser frequency GHz
197000
196000
195000
194000
193000
192000
191000
42.6
42.8
43.0
43.2
43.4
43.6
43.8
44.0
44.2
44.4
AOTF frequency MHz
11.834 kHz/Channel
194000
193900
193800
193700
193600
43.70
43.75
LasFreq
Δν Channel = 50.038 GHz

Figure 6

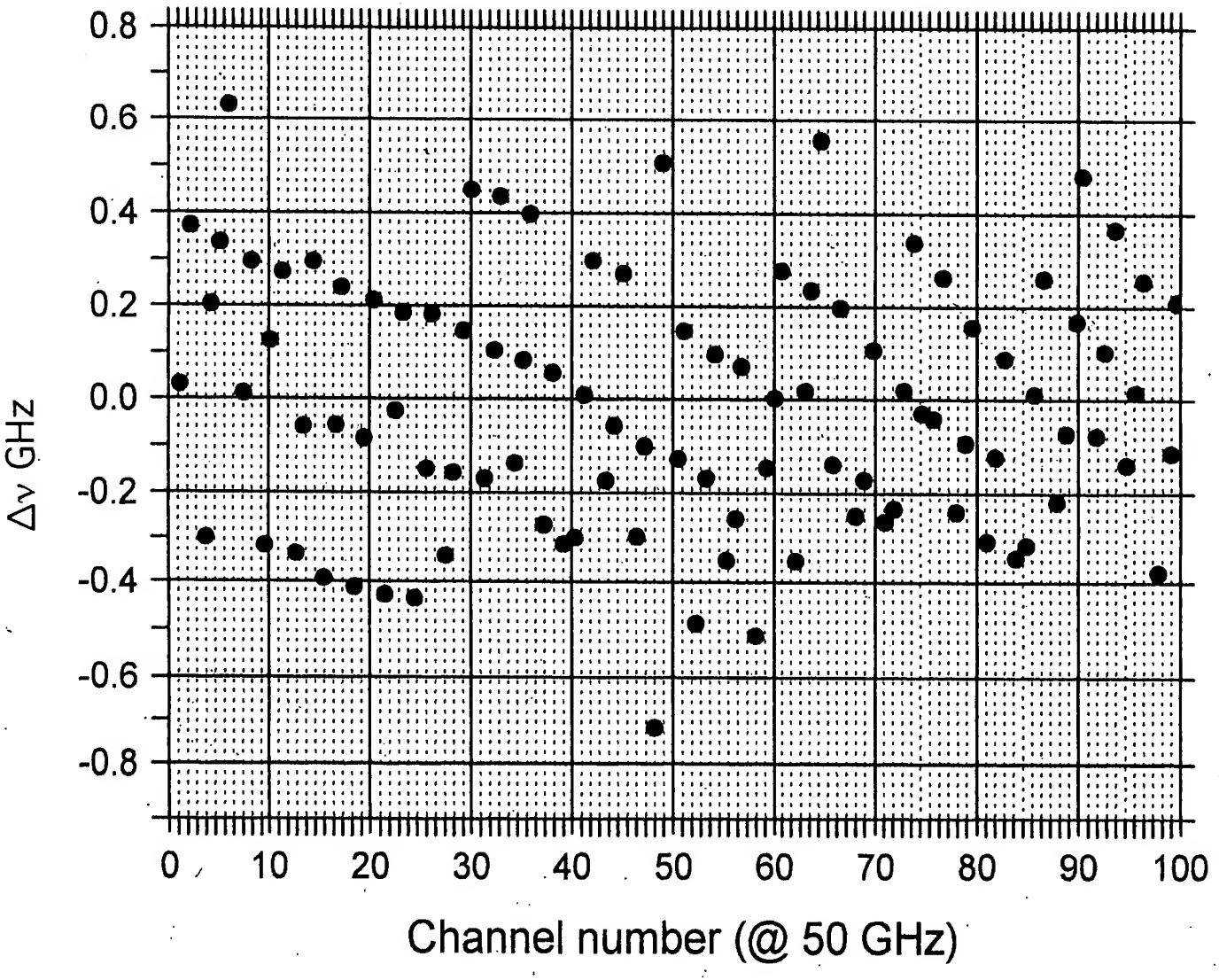
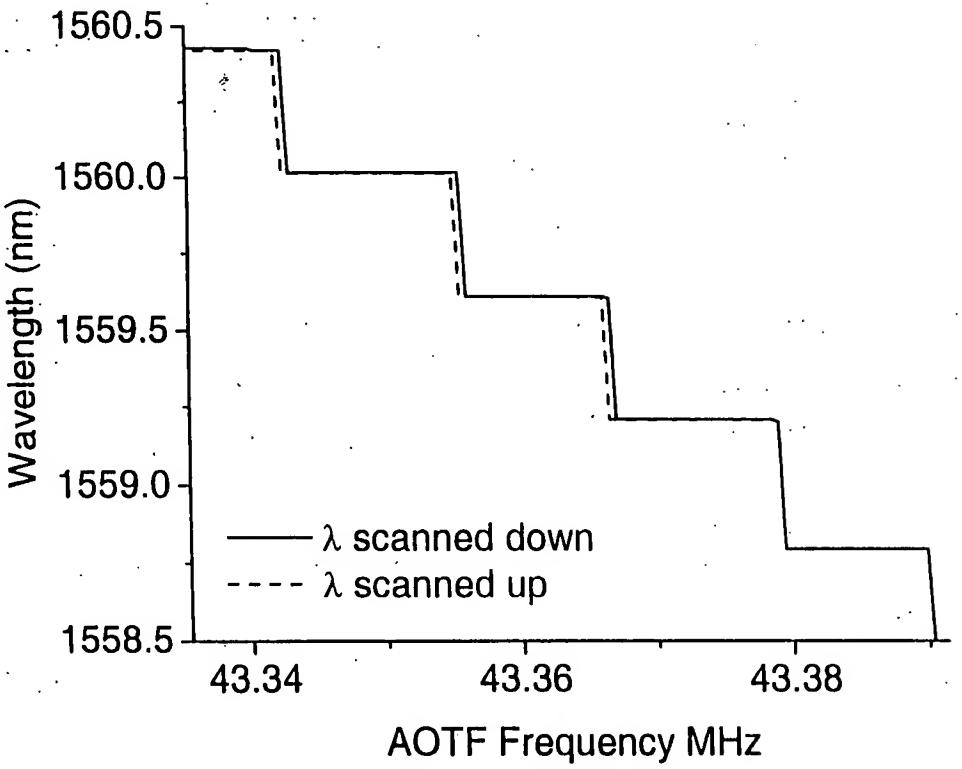

0.8
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
-0.8
Δν GHz
0
10
20
30
40
50
60
70
80
90
100
Channel number (@ 50 GHz)

Figure 7


1560.5
1560.0
1559.5
1559.0
1558.5
Wavelength (nm)
λ scanned down
λ scanned up
43.34
43.36
43.38
AOTF Frequency MHz